SECTION 2.0 SUMMARY

This summary presents a condensed version of information contained in the Draft Environmental Impact Statement (EIS) for the Silver Bow Generation Project with modifications subsequent to the public comment period. Three alternatives of the DEQ permitting actions and proposed activities by Continental Energy Services (CES) and Montana Power Company (MPC) have been analyzed in this EIS. If interested in more detailed information, please refer to the Draft EIS. The Final EIS and the Draft EIS can be obtained from the DEQ by contacting:

Mr. Greg Hallsten
Montana Department of Environmental Quality
1520 East 6th Avenue
P.O. Box 200901
Helena, MT 59620
(406) 444-3276

The EIS and Permitting Process for the Silver Bow Generation Project

The Silver Bow Generation Project (Project) is a 500-megawatt electric generation plant located near Butte proposed by Continental Energy Services (CES) and an associated upgrade and expansion of a natural gas pipeline proposed by Montana Power Company (MPC). The DEQ proposes to grant several environmental permits that would enable CES and MPC to implement the Silver Bow Generation Project. The purpose of the Proposed Action is to permit activities that provide additional electricity to meet increased demand for power within the western United States.

Procedures governing the EIS analysis process in Montana are defined in administrative rules implementing the Montana Environmental Policy Act (MEPA). This law requires an EIS to be prepared if any action taken by the State of Montana may significantly affect the quality of the human environment (as defined in MEPA). The EIS was written to meet the requirements of MEPA and the administrative rules implementing MEPA.

The Montana DEQ is the lead agency for this EIS. The EIS was prepared in response to permit applications to discharge wastewater and air emissions. DEQ and other agencies will use this EIS to make decisions on issuing permits and certifications.

The scope of the EIS includes actions, alternatives, and analyses necessary for the DEQ to make decisions regarding permits or approvals for CES and MPC to construct and operate the Project. Permitting decisions will be based on the environmental effects and consequences relative to legal standards as documented in this EIS, along with other information presented during agency decision-making processes.

Proposed Action

Continental Energy Services (CES) and Montana Power Company (MPC) have submitted applications to the State of Montana Department of Environmental Quality (DEQ) for environmental permits that will authorize the discharge of wastewater and air

emissions expected to occur when constructing and operating the Silver Bow Generation Project (Project).

The DEQ proposes to grant the following permits to Continental Energy Services (CES) and Montana Power Company (MPC):

- The granting of a Montana Pollutant Discharge Elimination System (MPDES) permit to Continental Energy Services (CES) by the Montana Department of Environmental Quality (DEQ) for wastewater discharge from the proposed Silver Bow generation project (the Project) power plant operations. This permitting action is required under the Montana Water Quality Act 75-5-101 *et seq.*, Montana Code Annotated (MCA), and the Administrative Rules of Montana (ARM) 17.30.1301 *et seq.*

- The granting of an air quality preconstruction permit to CES for the Silver Bow generation facility prior to operation or construction of the facility under the Prevention of Significant Deterioration (PSD) regulations contained in the ARM Title 17 Chapter 8 subchapter 8.

- The granting of an air quality preconstruction permit to MPC for a natural gas compression stations prior to operation or construction of the facility under the Prevention of Significant Deterioration (PSD) regulations contained in the ARM Title 17 Chapter 8 subchapter 8.

- The granting of two alterations to existing air quality permits to MPC for the operation of two natural gas compressor stations (Montana Clean Air Act 75-2-200 *et seq.*, MCA, and ARM 17.8.700 *et seq.)*

Additional permits, licenses and certificates issued by DEQ and other state, federal and local agencies are described in the draft EIS, Appendix A.

The Project is composed of two major construction and operation activities, each proposed by two separate project sponsors (Figure 1):

- ***Construction and operation of a power generation plant located approximately five miles west of Butte, proposed by Continental Energy Services, Inc. (CES).*** The generation plant would be a natural gas-fired combined cycle combustion turbine electric generation plant located in the Silicon Mountain Technology Park west of Butte, Montana. The generation plant would utilize two natural gas fired combustion turbines and one matched steam turbine. These three turbines would have a combined nominal capacity of 500 megawatts (MW). The site for the generation plant is a 20-acre parcel located in the northeast quarter of Section 35, Township 3 North, Range 9 West.

- ***Construction and operation of upgrades to an existing natural gas pipeline by Montana Power Company (MPC) that would extend from Cut Bank to the proposed CES generation plant.*** The natural gas Pipeline Project (Pipeline Project) is required to meet the needs of the generation plant. The existing mainline natural gas pipeline would be expanded with three pipeline loops (Choteau, Wolf Creek and Silver City loops), and a tap would be constructed into

the generation plant (Morel Tap). The pipeline project would be located in Teton, Lewis and Clark, and Silver Bow counties. A new compressor station would be located on the Silver City Loop. Two existing compressor stations, one at Cut Bank and one between the Choteau and Wolf Creek loops would be upgraded.

Issues of Concern

Issues of concern raised during the scoping process and consultation with other agencies are listed below and categorized under the resource area in which each concern is addressed in Chapter 4 of the draft EIS. An expanded description of scoping comments is provided in Appendix B of the draft EIS.

Land Use

- Impacts from noise and dust from construction of the generation plant and pipeline
- Visual impacts from cooling tower lighting and steam emissions at the generation plant
- Impacts to recreational fishing from reduced instream flows and streambed disturbance.

Geology

- Impacts to pipeline integrity from unstable geology and steep slopes.

Soils

- Impacts from sedimentation into streams and water bodies during construction activities.

Water

- Impacts to water quality in Silver Bow Creek from wastewater discharged from the generation plant.
- Impacts to water quality in Sheep Gulch from wastewater discharges
- Impacts to groundwater quality from the land application and disposal process.
- Impacts to surface water from sedimentation caused during pipeline construction. Impacts to existing water users on Warm Springs Creek from withdrawals for process water for the operation of the generation plant.

Wetlands

- Impacts to wetlands from pipeline construction

Vegetation

- Impacts to native vegetation from disturbance of the pipeline right of way and generation plant construction.
- Impacts to noxious weed control

Wildlife

- Impacts to nesting raptors, mountain plover and bighorn sheep from pipeline construction.

Fisheries and Aquatics

- Impacts to fisheries from sedimentation during pipeline construction, particularly to streams that contain spawning trout and/or native salmonid species.

- Impacts from water use and potential dewatering in Warm Springs Creek and water discharge into Silver Bow Creek.

Socioeconomic

- Impacts to tourist economy from loss of or impairment of the Missouri River Fishery**.**
- Impacts to MPC rate payers due to proposed pipeline construction costs

Health and Safety

- Impacts from Electric and magnetic field (EMF) effects for the Silver Bow to ASiMI 161 kV transmission line.

Air Quality

- Air quality impacts due to emissions from the generation facility, as well as potential natural gas releases from the compressor stations.

Infrastructure

- Develop an Emergency Response Plan which includes but is not limited to: Notification system for local emergency services, et al; rerouting traffic; detour route for commercial trucks (interstate route only); actions to minimize affected area; repair of the affected roadway and right-of-way; repair of the detour route(s).

Alternatives Reviewed in Detail in the EIS

The DEQ is considering three alternative courses of action in its evaluation of the permitting decisions and proposals brought forward by CES and MPC. These alternatives are:

- The Proposed Action includes the granting of permits described under the Proposed Action and the resultant construction and operation of the Generation Project as described by the project sponsors (CES and MPC).

- An alternative to the Proposed Action is the Proposed Action with additional construction and operational management practices designed to mitigate impacts from the Proposed Action.

- The No Action Alternative describes activities that would be expected to take place if the Proposed Action did not occur.

Expected Impacts From The Alternatives

Under the Proposed Action, all resource areas except geology would experience adverse environmental impacts, six resource areas (land use, soils, vegetation, wildlife, fisheries, and socioeconomic) would experience significant impacts and three resource areas (wetlands, infrastructure, and socioeconomics) would experience beneficial impacts. All significant impacts and many adverse but not significant impacts would be mitigated to nonsignificant or “no impact” with the implementation of mitigation measures described in the Mitigation Alternative. The No Action Alternative would result in no impacts to visual, recreation, soil, water, wetland, vegetation, wildlife, fish, and infrastructure resources. No-action could adversely affect socioeconomic and land use

resources.

Table S-1 provides a summary of impact severity for the Proposed Action and the Mitigation Alternative. Mitigation measures that reduce impacts of the Proposed Action from significant to less than significant in the Mitigation Alternative are also included in Table 1 below each significant impact. Impact categories listed in this chapter are simplified from impact descriptions provided in Chapter 4. For a detailed description of impacts, refer to the appropriate resource section in Chapter 4. Impact categories in Table 1 are: Adverse but not significant (A), Significantly adverse (S), Beneficial (B), and No impact (N).

Agency-Preferred Alternative

The agency's preferred alternative is the Proposed Action with Mitigation Measures Alternative (the Mitigation Alternative). The Mitigation Alternative would result in the implementation of mitigation measures that would reduce impact severity in most resource areas. In resource areas land use, soils, vegetation, wildlife, fisheries and socioeconomics all significant impacts from the Proposed Action would be reduced to adverse but not significant, or to no impact.

The Mitigation Alternative includes all activities described under the Proposed Action and additional mitigation measures described Section 2.2 of the EIS. These "add-on" mitigation measures are analyzed for residual environmental impacts in Section 4.2 of the EIS. Mitigation measures that would reduce significant impacts to less than significant are listed with the corresponding impact in Table S-1. Most of the measures described in this alternative address concerns raised by state agencies and the public during the scoping process.

> Most of the additional mitigation measures listed in the Mitigation Alternative cannot be required by DEQ without a request from the project sponsor that they be placed in a permit. CES and MPC may request that any or all of the mitigation measures that pertain to expected impacts from their proposed activities be placed in the permits. Once CES or MPC has requested that a mitigation measure in this section be incorporated in a permit, it becomes mandatory and enforceable as part of the permit.

In those instances when the sponsor chooses not to include a mitigation measure in a state permit, and the project sponsor agrees to perform the proposed mitigation, the project sponsor can choose to work with the appropriate agency or entity to perform the action.

Since the following mitigation measures address choice on the part of the project sponsors, it is possible none of the proposed mitigation measures will be selected. If a mitigation measure is not selected, impacts from the Proposed Action that would have been mitigated would remain. Mitigation measures described under this alternative that are selected by the project sponsors will be identified in DEQ's Record of Decision.

GENERATION PLANT CONSTRUCTION AND OPERATION MITIGATION MEASURES

Measures described in this section were developed to mitigate impacts described in Chapter 4 of the draft EIS from the activities proposed by CES. Mitigation measures are categorized by resource area.

Land Use and Visuals

Generation Plant Exhaust Stack Lighting

CES would provide the FAA with information regarding residential land uses surrounding the generation plant and industrial park, and identify preferred lighting for the exhaust stacks that does not include strobe lights.

Water and Fisheries

Maintenance of Adequate Instream Flow

CES would seek continuation of adequate instream flow rates in Warm Springs Creek by implementing one or both of the following:

- CES would initiate and support a process by which surface water rights holders in the Warm Springs Creek watershed (the basin) develop and comply with a Water Management Plan for the basin that adequately addresses minimum instream flows. CES would initiate the process in cooperation with the Montana Department of Natural Resources and Conservation (DNRC) at least one year before use of industrial process water begins. CES would support the process by providing adequate meeting space and an independent facilitator to identify and invite participation from interested water rights holders in the basin. The facilitator would work in cooperation with DNRC, Fish, Wildlife and Parks, and water rights holders that must include ARCO and the city and county of Butte-Silver Bow to develop a Water Management Plan to meet the following two goals: (1) First and foremost to manage releases from Silver Lake that would enable Lower Warm Springs Creek (below Gardner Ditch) to maintain no less than 16 cubic feet per second (cfs) throughout the year, and (2) to enable Butte-Silver Bow to use all water rights allocated for development of the Silicon Mountain Technology Park.

- CES would augment flow in Warm Springs Creek, through negotiations with other water rights holders and management of process water withdrawal timings, that minimum instream flow conditions (at least 16 cfs below Gardner Ditch) are met in Warm Springs Creek throughout the year.

Vegetation

LAD

The project sponsor would include in the Weed Control Plan a provision to vegetate sprinkler discharge sites at the LAD with salt-tolerant species such as tall fescue and monitor the efficacy of salt removal via plant uptake. If loss of vegetation occurs, CES would modify the LAD operation and/or location to result in healthy vegetation.

Native Species Planting

The project sponsor would include in the Weed Control Plan a provision to plant native species in areas disturbed by project activities and not permanently occupied by project facilities.

Noise

CES would implement noise control measures at the generation plant such as silencers for decreasing noise generated during boiler steam blowout for plant start-up and maintenance.

PIPELINE CONSTRUCTION AND OPERATION MITIGATION MEASURES

Measures described in this section were developed to mitigate impacts described in Chapter 4 from activities proposed by MPC. Mitigation measures are categorized by resource area.

Land Use

Apiary Sites

Prior to building of the gas pipeline, coordination should occur between construction activities and the beehive operators. It may be possible to relocate hives within the same apiary site; causing the hive to be situated in an area farther away from construction activities. Beekeepers typically rotate bees between apiary sites. Ideally, hives would be relocated to another registered apiary site during the period of pipeline construction.

Superfund Sites

Coordinate with ARCO to include pipeline construction and operation in the ARCO long-term Management Plan for wildlife conservation at the Warm Springs Pond Superfund Site.

Water and Fisheries

Placement of Construction Materials

No material would be left in the stream channel after completing construction activity.

Scour Protection

Unless otherwise required by the DNRC Floodplain Section, the 100-year depth of scour would be determined at each perennial stream crossing by a professional with expertise in river mechanics and sediment transport. Depths would be calculated on crossing specific and local hydraulic and geomorphic conditions. This includes crossings that do not yet have DNRC-designated 100-year flood plain.

Bank Erosion and Scour Protection

Unless otherwise required by the DNRC Floodplain Section, minimum pipeline burial depths at perennial stream crossings, as determined by the 100-year depth of scour times two calculation, would be extended laterally into the stream bank a distance beyond any bank erosion than can reasonably occur during a 100-year flood as determined by a professional with expertise in river mechanics and sediment transport. This includes crossings that do not have a DNRC-designated 100-year flood plain.

Pipeline Cover Monitoring

MPC would arrange for the monitoring of pipeline integrity and cover depth at perennial stream crossings on a routine basis (at least once a year) or immediately following a high flow event.

Silver Creek Crossing - Soils

MPC would ensure appropriate disposal of contaminated fill material, if present, such that fish are not affected.

Silver Creek Crossing - Method

MPC would employ a dry or trenchless stream crossing of Silver Creek.

Dearborn River Stream Crossing

MPC would employ a trenchless crossing method of the Dearborn River.

Dry or Trenchless Crossing

MPC would employ a dry or trenchless crossing of the Sun River, the Backwater of the Teton River, Jones Creek, Muddy Creek, Spring Creek, Big Coulee Creek and Flat Creek.

Fish Entrainment Protection

MPC would ensure that screen intake pipes for hydrostatic test water are installed with the smallest practicable screen to reduce risk of fish entrainment.

Whirling Disease Mitigation

MPC would require contractors to clean all equipment or other items used for in-stream construction that have been in a whirling disease contaminated stream to FWP standards for preventing the spread of whirling disease.

Stream Crossing Timing

Strictly adhere to timing windows recommended by FWP to ensure that streams are crossed at the least damaging period of year for impacts to fish.

Soil and Vegetation

Topsoil Salvage

Pipeline construction activities resulting in soil excavation would salvage the uppermost topsoil horizon(s) and stockpile the materials for reclamation coversoil after regrading. At a minimum, topsoil salvage depth would include all horizons dominated by organic material or containing an accumulation of organic matter to a depth of 12 inches.

Multiple Horizon Soil Salvage

For agricultural lands, soil and salvage operations would include multiple horizons (i.e. topsoil and subsoil) salvaged separately and replaced sequentially to help mitigate the potential loss of soil productivity.

Soil Compaction Minimization

All salvaged coversoil would be respread over the regraded trench using tracked equipment to minimize soil compaction.

100-year Flood Plain

Temporary access roads would be located, to the maximum degree, on soils outside the 100-year floodplain.

Reseeding

MPC would include in the Weed Control Plan the provisions that all disturbed areas would be reseeded with site-adapted seed mixtures and adequate seed rates of pure live seed in the first appropriate season (Spring or Fall) after construction and at landowners discretion. Areas disturbed by the Project that supported native vegetation would be revegetated with native species.

Temporary Cover of Disturbed Areas

CES would ensure that disturbed areas would be seeded with temporary nurse crops or cover-crops if construction is completed during the summer months (June through August).

Minimize Vegetation Cleanup

Existing vegetation would only be cleared from areas scheduled for immediate construction work and only for the width needed for active construction activities.

Revegetation Monitoring

MPC would monitor revegetated areas for five years and implement remedial revegetation if needed.

Botanical Surveys

The project sponsor would perform pre-construction botanical surveys of staging yards, contractor yards, and other associated facilities and mitigate if noxious weeds are not controlled in reclaimed areas.

Riparian Vegetation

The project sponsor would mow or cut, rather than blade, woody riparian and wetland vegetation to the extent practicable.

Riparian Reclamation

Plant comparable native woody species in all areas where woody riparian vegetation is disturbed and mitigate disturbances of high-quality riparian areas.

Special-Status Plants

The project sponsor would use narrowed right-of-way or, where possible, minor reroutes to minimize or avoid impacts to special-status plant populations.

Contractor Compliance

MPC would ensure contractors adhere to all mitigation measures.

Pollution Prevention

Pollution Prevention

All vehicles and equipment utilized during pipeline construction would be clean, in good repair, and without leaks or oil, gasoline, diesel, or other materials which would contaminate stream water quality. The contractor or MPC would conduct daily equipment inspections for leaking oil and fuel.

Wildlife

Big Game Avoidance

MPC would consult with FWP to develop timing restrictions to avoid constructing in big game winter range during critical periods.

Add Table S-1 here (use landscape)